



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,055	10/21/2003	Kun-Lang Yu	YUKU3003/EM	3408
23364 7590 07/11/2007 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			EXAMINER NEWMAN, MICHAEL A	
			ART. UNIT 2624	PAPER NUMBER
			MAIL DATE 07/11/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/689,055

Applicant(s)

YU ET AL.

Examiner

Michael A. Newman

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Double Patenting*

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claim 1 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of copending Application No. 10/864330. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 2624

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 1 is provisionally rejected on the ground of nonstatutory double patenting over claim 1 of copending Application No. 11/099,566. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

Although the claims are not identical, the present claims are broader and therefore if issued it would unduly extend the timewise monopoly given to the claims of Application No. 11/099,566.

Claim 1 in the present application is broader than claim 1 of Application No. 11/099,566, which includes the limitations of at least one illumination device *arranged in a card socket which is formed on the automatic teller machine.*

5. Claim 1 is provisionally rejected on the ground of nonstatutory double patenting over claim 1 of copending Application No. 11/099,618. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

Although the claims are not identical, the present claims are broader and therefore if issued it would unduly extend the timewise monopoly given to the claims of Application No. 11/099,618.

Art Unit: 2624

Claim 1 in the present application is broader than claim 1 of Application No. 11/099,618, which includes the limitations of an illumination device projecting a *predetermined wavelength of light* on a sample pattern.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1, 4, 5, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (U.S. Patent No. 6,571,001) in view of Tamagaki (U.S. Patent No. 5,999,646). Hereinafter referred to as Murphy and Tamagaki respectively.

a. Regarding claims 1, 4 and 9, Murphy teaches a pattern identification system, comprising: at least one optical scanning unit (**Murphy Col. 3 lines 32 – 33**) adapted to magnify an image of the sample sheet with a predetermined magnifying times to obtain an identifiable image of difference sufficient for

identification (**Murphy Fig. 3 element 302 – See Col. 3 lines 20 – 24**) and a programmable identification member (**Murphy Fig. 3 element 310**) including a recognizing logic adapted to process the identifiable image so as to generate a difference between the identifiable image and the recognizing logic (**Murphy Col. 5 lines 6 – 9**) [**Note that the logic used to identify a copy/scan is the detection of the “microdot” pattern**], and the programmable identification member adapted to identify the identifiable image outputted from the video camera unit (**Murphy Col. 3 lines 49 – 54**). However, although Murphy teaches a generic optical scanning device; **Murphy fails to teach** the hardware specifics including the use of a video camera as the scanning device. **Pertaining to the same field of endeavor, Tamagaki teaches a scanner (Tamagaki Fig. 2 element 2 – See Col. 4 line 54 – Col. 5 line 25) including an illumination device adapted to project light on the sample pattern (Tamagaki Fig. 2 element 24); a controller connected to the illumination device to turn it on or off [implicitly taught], the controller further connected to the video camera unit to capture the identifiable image of the sample pattern [Note that Tamagaki clearly teaches using a CCD (Tamagaki Col. 4 lines 62 – 63). It is well known in the art that a CCD can operate as a video camera. Furthermore applicant’s own specification defines a “video camera unit” as a CCD, page 8 lines 9 – 12.]; wherein the controller controls the video camera unit to output the identifiable image to the programmable identification member for identification (Tamagaki Fig. 3 – element 74 – See**

**Col. 5 line 26 – 28). Therefore, since Tamagaki only teaches using an optical scanning device without setting forth the specifics, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the scanning apparatus taught by Tamagaki as the, generically taught, “optical scanning device” in Murphy in order to implement Murphy’s copy/scanned document detection method using commonly available copying/printing systems and thus eliminating the expense of designing and manufacturing a specialized device.**

b. Regarding claim 5, Murphy in view of Tamagaki teach all the limitations of the independent claim 1 as set forth in the 103 rejection of claim 1 above.

Murphy further teaches that the video camera unit is adapted to capture a first image of the sample pattern so as to measure a reference coordinate of the sample pattern for selecting a predetermined position **(Murphy Col. 4 lines 17 – 22) [Note that a first low-resolution scan is taken to locate areas to be scanned at high-resolution]**

c. Regarding claim 10, Murphy in view of Tamagaki teach all the limitations of the independent claim 1 as set forth in the 103-rejection of claim 1 above. Furthermore Murphy teaches that the controller is a Central Processing Unit – CPU **(Murphy Col. 3 lines 39 – 40)**. It is old and well known in the art that a CPU can be replaced by a control logical circuit or a control integrated circuit for simple operations in order to reduce parts costs.

Art Unit: 2624

7. Claim 3, 11, 13, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (U.S. Patent No. 6,571,001) in view of Tamagaki (U.S. Patent No. 5,999,646) as applied to claim 1 above, and further in view of Christophersen (U.S. Patent No. 6,970,235). Hereinafter referred to as Murphy, Tamagaki and Christophersen respectively.

a. Regarding claim 3, Murphy and Tamagaki teach all the limitations of the independent claim 1 as set forth on the 103 rejection of claim 1 above. However, both **Murphy and Tamagaki fail to teach** that the illumination device projects a particular wavelength and brightness of light according to various types of the sample pattern. **Pertaining to the same field of endeavor, Christophersen teaches a document monitoring apparatus in which the illumination devices irradiate at several predetermined wavelength bands in order to retrieve not only document classification/authentication information but also information about soiling and other conditions (Christophersen Col. 2 lines 28 – 33) by detecting reflective and transmitted radiation. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the illumination source of Tamagaki to generate specific wavelengths in order to monitor known document responses such as translucence and fluorescence, which provide additional verification comparison points.**

b. Regarding claim 11, Murphy and Tamagaki teach all the limitations of the independent claim 1 as set forth on the 103 rejection of claim 1 above. Murphy



also teaches that the programmable identification member is an identification logical circuit (**Murphy Col. 5 lines 6 – 9**) [Note that the logic used to identify a copy/scan is the detection of the “microdot” pattern]. However, **Murphy and Tamagaki fail to teach** that the programmable identification member is an identification database of a computer software. **Pertaining to the same field of endeavor, Christophersen teaches classifying documents by comparing them to predetermined templates stored in a store (Christophersen Col. 5 lines 27 – 29). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to store a plurality of template references as taught by Christophersen in order expand the system’s capability to classify documents into a plurality of classes.** [Note that the claim, as recited, does not require both an identification logical circuit and an identification database to meet its limitations].

b. Regarding claims 13, 14 and 16, Murphy and Tamagaki teach all the limitations of the independent claim 1 as set forth on the 103 rejection of claim 1 above. However, both **Murphy and Tamagaki fail to teach** that the illumination device is consisted of a plurality of illuminations, which are used to project a front surface and rear surface of the sample pattern. **Pertaining to the same field of endeavor, Christophersen teaches a document monitoring apparatus in which a plurality of illumination sources projecting the front and rear surface of the document (Christophersen Fig. 1a. elements 12, 13 and 5). Therefore it would have been obvious to one of ordinary skill in the art at**

the time the invention was made to add illumination sources below the document as taught by Christophersen in order to evaluate the translucent properties of the document media and thus increase points of comparison for verification.

- Regarding claim 16, note that front and rear are two different angles.

However, Christophersen also teaches the two front illumination devices (12 and 13) at different angles.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (U.S. Patent No. 6,571,001) in view of Tamagaki (U.S. Patent No. 5,999,646) as applied to claim 1 above, and further in view of Srivastava et al. (U.S. Patent No. 4,813,588). Hereinafter referred to as Murphy, Tamagaki and Srivastava respectively.

a. Regarding claim 15, Murphy and Tamagaki teach all the limitations of the independent claim 1 as set forth on the 103 rejection of claim 1 above. However, both **Murphy and Tamagaki fail to teach** that the illumination device includes a mechanism adapted to mechanically adjust its projecting direction so that it has an included angle with respect to a vertical direction. **Pertaining to the same field of endeavor, Srivastava teaches a circuit-board surface inspection system including two light sources (Srivastava Fig. 9 elements 50a and 50b) mounted on structures (Srivastava Fig. 9 structure 52b, 54b, 56b and 58b) that allow their angles of incidence to be adjusted (Srivastava Col. 3 lines 47 – 56). Furthermore, Srivastava teaches that by modifying the**

angle, it is possible to more easily detect surface changes (Srivastava Col. 3 lines 59 – 63). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to mount the illumination source in Tamagaki on a mechanically adjustable mount as taught by Srivastava in order to adjust the grazing angle and enable the detection of surface imperfections or paper textures specific to the documents being examined.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (U.S. Patent No. 6,571,001) in view of Tamagaki (U.S. Patent No. 5,999,646) as applied to claim 1 above, and further in view of Satoshi (Japanese Publication No. 10-040386).

Hereinafter referred to as Murphy, Tamagaki and Satoshi respectively.

a. Regarding claim 6, Murphy and Tamagaki teach all the limitations of the independent claim 1 as set forth on the 103 rejection of claim 1 above. Murphy teaches capturing first a low-resolution image to locate areas that are going to further scanned at high-resolution (**Murphy Col. 4 lines 17 – 22**). However, both **Murphy and Tamagaki fail to teach** that the video camera unit consisted of a first camera and a second camera, the first camera is adapted to measure a reference coordinate of the sample pattern, and the second camera is adapted to capture the identifiable image for identification. **Pertaining to the same field of endeavor, Satoshi teaches a face-feature recognition apparatus. Specifically, Satoshi teaches using two cameras a main camera (Satoshi Drawing 1. element 1) that images the entire face and detects the location**

Art Unit: 2624

of the eyes. A second, migration camera (Satoshi Drawing 1. element 2) is directed to the location and images only the eye area (Satoshi Paragraph 0006). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Murphy's two-resolution level process using Satoshi's first and second cameras to first locate and then capture the desired document regions in order to eliminate the need for advance zoom-in mechanism resulting in expensive cameras (Satoshi Paragraph 0003 lines 6 – 7).

10. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (U.S. Patent No. 6,571,001) in view of Tamagaki (U.S. Patent No. 5,999,646) as applied to claim 1 above, and further in view of Jones (U.S. Pg Pub No. 2003/0009420). Hereinafter referred to as Murphy, Tamagaki and Jones respectively.

a. Regarding claims 7 and 8, Murphy and Tamagaki teach all the limitations of the independent claim 1 as set forth on the 103 rejection of claim 1 above. However, both **Murphy and Tamagaki fail to teach** that the video camera unit consisted of a first camera and a second camera, the first camera is adapted to capture an image of a front surface of the sample pattern, and the second camera is adapted to capture an image of a rear surface of the sample pattern. **Pertaining to the same field of endeavor, Jones teaches an image scanning apparatus (Jones Fig. 6 element 650) including two scan heads (Jones Fig. 6 elements 602 and 604) placed one each above and below the document.**

**The arrangement scans both the front and back of the document simultaneously (Jones Paragraph 0052). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use two scan heads in Tamagaki's apparatus as taught by Jones in order to simultaneously capture valuable information from both the front and back of the document (Jones Paragraph 0048 lines 8 – 13).**

- Regarding claim 8, Tamagaki teaches that the document is placed on transparent glass plate (**Tamagaki Col. 5 lines 5 – 7**). Furthermore, it is inherent that in order form Jones' second skinhead to image the bottom of the document traveling on the transport system, the surface must be transparent at least at a certain predetermined wavelength.

11. Claims 2, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (U.S. Patent No. 6,571,001) in view of Tamagaki (U.S. Patent No. 5,999,646) as applied to claim 1 above, and further in view of Britt (U.S. Patent No. 4,453,268).

a. Regarding claim 2, Murphy and Tamagaki teach all the limitations of the independent claim 1 as set forth on the 103 rejection of claim 1 above. However, both **Murphy and Tamagaki fail to teach** a display device adapted to display an identified result outputted from the programmable identification member.

**Pertaining to the same field of endeavor, Britt teaches an OCR system including a CRT display for displaying the result of the scan (Britt Fig. 1**

**element 22 – See Col. 5 lines 4 – 11). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a display in order to display to a user the resulting scanned document and the patterns recognized by Murphy's method.**

b. Regarding claims 17 and 18, Murphy and Tamagaki teach all the limitations of the independent claim 1 as set forth on the 103 rejection of claim 1 above. However, both **Murphy and Tamagaki fail to teach** that the illumination device has a circular configuration which is arranged along an entire periphery of a stage so as to project uniform light on the sample pattern that can avoid errors of capturing image and identification; and the circular configuration of the illumination device is consisted of a single illuminator or serial connected illuminators. **Pertaining to the same field of endeavor, Britt teaches an OCR page reader with a circular fluorescent light (Britt Fig. 1 element 14 – See Col. 4 lines 19 – 20) [Note that it spans the entire inner cavity of the enclosure]. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a circular illumination device as taught by Britt into Tamagaki's apparatus in order to provide uniform illumination of the document resulting in more accurate inspection (Britt Col. 2 lines 38 – 40).**

- Regarding claim 18, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reduce the illumination device taught by Britt to a semi-circular element in order to reduce the size,

**manufacturing cost and power consumption of the imaging apparatus at the expense of a less uniform document illumination for applications that do not require the highest detection sensitivity.**

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murphy (U.S. Patent No. 6,571,001) in view of Tamagaki (U.S. Patent No. 5,999,646) as applied to claim 1 above, and further in view of Atarashi et al. (U.S. Patent No. 6,987,868). Hereinafter referred to as Murphy, Tamagaki and Atarashi respectively.

a. Regarding claim 12, Murphy and Tamagaki teach all the limitations of the independent claim 1 as set forth on the 103 rejection of claim 1 above. Murphy teaches detecting printed ink microdot patterns (**Murphy Col. 5 lines 6 – 9**). However, both **Murphy and Tamagaki fail to teach** that the programmable identification member is able to identify features consisted of printing line structure, raised ink, printing color, fiber property, fiber component and fiber density. **Pertaining to the same field of endeavor, Atarashi teaches a genuine/counterfeit discrimination system based on identifying inorganic or organic fibers on the substrate (Atarashi Col. 5 lines 6 – 8 and 13 – 14), printed or raised seals or marks (Atarashi Col. 5 lines 55 – 62) and color ink composition (Atarashi Col. 6 lines 25 – 30). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use all or any combination of known document identification and security features as verification references as taught by Atarashi**

**depending on both the desired security robustness level and the acceptable processing load or delay.**

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. De Man (U.S. Patent No. 5,304,813) teaches a document optical recognition apparatus including a plurality of sources on top and below the document.
- b. Nagel (U.S. Patent No. 7,152,047) teaches a system for authenticating original documents by detecting several features including the density and color of paper cellulose fibers.
- c. Sakou et al. (U.S. Patent No. 5,448,651) teaches document section detection method based on texture discrimination.
- d. Huynh et al. (U.S. Patent No. 4,878,114) teaches an apparatus for measuring surface roughness by adjusting the illumination source grazing angle.
- e. Lewis (U.S. Patent No. 4,398,825) teaches a ball inspection system which uses a semicircular array of light sources to uniformly illuminate the surface.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A. Newman whose telephone number is (571)



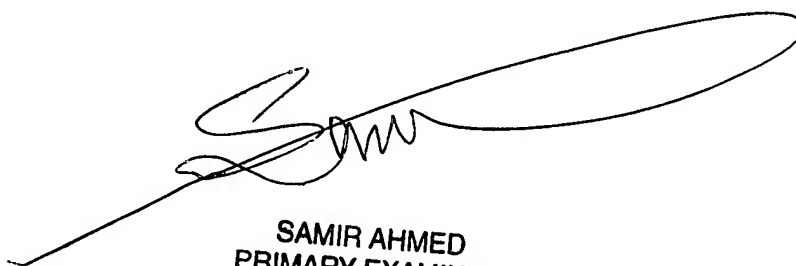
Art Unit: 2624

270-3016. The examiner can normally be reached on Mon - Thurs from 8:30am to 6:30pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir A. Ahmed can be reached on (571)272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M.A.N.



SAMIR AHMED  
PRIMARY EXAMINER